## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

03-284726

(43) Date of publication of application: 16.12.1991

(51)Int.Cl.

G02F 1/1337

(21)Application number : 02-085923

(71)Applicant: HITACHI CHEM CO LTD

(22)Date of filing:

30.03.1990

(72)Inventor: MINAMIZAWA HIROSHI

NOMURA YOSHIHIRO HANABUSA KAZUTO

KIMURA YOICHI

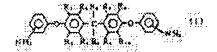
**MORINAGA TAKASHI** 

## (54) COMPOSITION FOR LIQUID CRYSTAL ORIENTED FILM, LIQUID CRYSTAL ORIENTED FILM, LIQUID CRYSTAL CRIMPING SUBSTRATE AND LIQUID CRYSTAL DISPLAY ELEMENT

## (57)Abstract:

PURPOSE: To obtain the compsn. for the liquid crystal oriented film contg. an arom. polyether amide polymer by bringing specific arom. diamine, and diamines exclusive thereof at need and specific arom. dicarboxylic acid or the reactive deriv. thereof into reaction.

CONSTITUTION: The liquid crystal oriented film contg. the arom. polyether amide polymer is obtd. by bringing the arom. diamine expressed by formula I and the diamines exclusive thereof at need and the arom. dicarboxylic acid expressed by formula II or the reactive deriv. thereof into reaction. In the formula, R1 to R10 are independently H, lower alkyl group, lower alkoxy group or halogen atom or halogenated alkyl group and at least one thereof includes at least one F. Ar denotes a p or m-



phenylene group, naphthylene group, etc. X denotes -OH, CI or Br. The use amt. of the arom. diamine expressed by the formula I is specified to ≥15mol% based on the use amt. of the entire diamine. The liquid crystal oriented film having the large tilt angle is obtd. by this

Searching PAJ Page 2 of 2

compsn., by which the oriented film crimping substrate and the liquid crystal display element are obtd.

## **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]